

execution system, apparatus, or device. A computer-readable medium may comprise a computer-readable storage medium that may be any media or means that can contain or store the instructions for use by or in connection with an instruction execution system, apparatus, or device.

[0056] Although various aspects of the invention are set out in the independent claims, other aspects of the invention comprise other combinations of features from the described embodiments and/or the dependent claims with the features of the independent claims, and not solely the combinations explicitly set out in the claims.

[0057] It is also noted herein that while the above describes example embodiments of the invention, these descriptions should not be viewed in a limiting sense. Rather, there are several variations and modifications which may be made without departing from the scope of the present invention as defined in the appended claims.

[0058] For example, while the example embodiments have been described above in the context of the LTE-LAN system, it should be appreciated that the example embodiments of this invention are not limited for use with only this one particular type of wireless communication system. For example, the example embodiments may be used to advantage in device to device, D2D, system.

[0059] Further, the various names used for the described parameters are not intended to be limiting in any respect, as these parameters may be identified by any suitable names.

[0060] If desired, the different functions discussed herein may be performed in a different order and/or concurrently with each other. Furthermore, if desired, one or more of the above-described functions may be optional or may be combined. As such, the foregoing description should be considered as merely illustrative of the principles, teachings and example embodiments of this invention, and not in limitation thereof.

1-40. (canceled)

41. A method, comprising:

determining a distance from a network element; and assigning at least one of a downlink resource or an uplink resource to the network element based at least in part on the determined distance, wherein the assigned resource is used for both a downlink and an uplink communication of the network element.

42. The method of claim **41**, further comprising:

assigning an orthogonal reference signal to the network element.

43. The method of claim **42**, further comprising:

instructing the network element to monitor and report channel quality based on the assigned orthogonal reference signal.

44. The method of claim **41**, further comprising:

indicating at least one of a power level and a scheduling grant to the network element.

45. The method of claim **41**, further comprising:

receiving a report from the network element indicating at least one of a scheduling grant and a scheduling power of the network element.

46. An apparatus comprising:

at least one processor, and at least one memory including computer program code, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to:

determine a distance from a network element; and assign at least one of a downlink resource or an uplink resource to the network element based at least in part on the determined distance, wherein the assigned resource is used for both a downlink and an uplink communication of the network element.

47. The apparatus of claim **46**, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to:

assign an orthogonal reference signal to the network element.

48. The apparatus of claim **47**, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to:

instruct the network element to monitor and report channel quality based on the assigned orthogonal reference signal.

49. The apparatus of claim **46**, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to:

indicate at least one of a power level or a scheduling grant to the network element.

50. The apparatus of claim **46**, wherein the at least one memory and the computer program code configured to, with the at least one processor, cause the apparatus to:

receive a report from the network element indicating at least one of a scheduling grant or a scheduling power of the network element.

51. A computer program product comprising a computer-readable medium bearing computer program code embodied therein for use with a computer, the computer program code includes code for:

determining a distance from a network element; and assigning at least one of a downlink resource or an uplink resource to the network element based at least in part on the determined distance, wherein the assigned resource is used for both a downlink and an uplink communication of the network element.

52. The computer program product of claim **51**, wherein the computer program code further comprises code for:

assigning an orthogonal reference signal to the network element.

53. The computer program product of claim **52**, wherein the computer program code further comprises code for:

instructing the network element to monitor and report channel quality based on the assigned orthogonal reference signal.

54. The computer program product of claim **51**, wherein the computer program code further comprises code for:

indicating at least one of a power level or a scheduling grant to the network element.

55. The computer program product of claim **51**, wherein the computer program code further comprises code for:

receiving a report from the network element indicating at least one of a scheduling grant or a scheduling power of the network element.

56. A method, comprising:

receiving an assignment of resource from a network element, wherein the resource is at least one of a downlink resource or an uplink resource of the network element; and

applying the resource for both a downlink and an uplink communication with a device.